

## In the Specification

Please amend the paragraph appearing at page 9, line 26 through page 10, line 3, as follows:

 $\mathcal{A}'$ 

In addition to a taxonomy and product ontologies, a schema may include a set of attributes for each seller (which may be referred to as a "seller ontology"). Such attributes may include geographic restrictions (such as served markets), currencies accepted by each seller, collaboration tools accepted by each seller, contract terms accepted by each seller, types of contracts accepted by each seller, levels of buyer credit required by each seller, and any other suitable seller attributes. Similar to a products products within a product class, sellers offering products within a product class may be defined by seller attribute values corresponding to seller attributes. Accordingly, a schema may include a set of classes, each including one or more products, and each class may be associated with a set of product attributes and a set of seller attributes.

Please amend the paragraph appearing at page 10, line 26 through page 11, line 4, as follows:



A buyer 20 may navigate through directory structure 44 by expanding or collapsing various classes as desired. For example, FIGURE 2 illustrates an expansion of certain classes of directory structure 44 to reach a "felt-tip pen" class 60b. Once a buyer 20 has navigated to a class that is specific enough for buyer 20 (and/or a "leaf" class that is at the end of a branch), buyer 20 may perform a search for products within that class. For example, buyer 20 can search for all products in "writing utensils" class 56 that are blue felt-tip pins pens having medium tips. Alternatively, if buyer 20 navigates to the end of a branch of directory structure 44 (to a leaf class), such as "felt-tip pen" class 60b, GCD 42 may then enable buyer 20 to search for such pens that have blue ink and medium tips (which may reach the same result as the search above).

Please amend the paragraph appearing at page 11, line 5 through line 18, as follows:

 $Q^2$ 

Buyer 20 may also search for sellers matching one or more seller attribute values within a product class. For example, in addition to searching for all products in writing utensils class 56 that are blue felt-tip pins pens having medium tips, buyer 20 may search for sellers 30 serving Texas that accept U.S. dollars. Buyer 20 may search for products matching certain product attribute values and sellers matching certain seller attribute values in any appropriate manner. In one embodiment, for example, buyer 20 provides search criteria including both values for product attributes and for seller attributes (search criteria may instead be generated automatically, in whole or in part, as described below), and server 40 searches for products that match the product attribute criteria and are offered by sellers matching the seller attribute criteria. In another embodiment, buyer 20 provides only product attribute values as search criteria, and server 40 limits its search for products matching the product attribute criteria to databases 32 associated with sellers 30 known to match seller attribute criteria that buyer 20 may want according to a buyer profile or otherwise.

Please amend the paragraph appearing at page 14, lines 21 through 32, as follows:



Returning to FIGURE 2, when GCD 42 has performed a search of the databases 32 and/or repository 34 (or particular tables thereof) identified by a pointer or pointers associated with a class that buyer 20 has selected or that has been automatically selected, GCD 42 may return product data and/or seller data associated with one or more products matching the search criteria. GCD 42 may integrate the product data and/or seller data resulting from the search into directory structure 44 so that the data appears to buyer 20 as being part of GCD 42. GCD 42 may alternatively present the results of the search in any other appropriate manner. Each product resulting from the search may be an object which is unique a unique instance of the class in which buyer 20 is searching. Furthermore, each such object (and its location) may be uniquely identified using a numbering scheme corresponding to directory structure 44.

Please amend the paragraph appearing at page 22, line 21 through page 23, line 5, as follows:

As described above, the ontology associated with a class includes the names of attributes associated with the class. Since these attribute names are used to identify attribute values in seller databases 32 and repository 34, these attribute names or similar attribute names may be used to identify the target data. For example, these or similar attribute names may be used a column as column headings in a table including the target data (for example, like the column headings of table 150). Therefore, data association module 39 attempts at step 204 to identify portions of the target data, such as column headings of a table of target data, that match the names of the attributes included in the ontology of one or more classes of the target schema. As an example, data association module 39 may search the target data for each attribute name associated with the ontologies of the target schema. Data association module 39 identifies the data associated with any matching attribute names (such as the values in a column of the target data having a heading matching an attribute name) so that the data may be associated with the appropriate classes of the target schema. Although this association may be performed after step 204 is performed (and after each of the other "techniques" described below are performed), the association of data identified using these techniques is described below as step 218 of the example method.

Please amend the paragraph appearing at page 23, lines 6 through 21, as follows:\_

At step 206, data association module 39 attempts to identify portions of the target data that are similar to the names of the attributes included in the ontology of one or more classes of the target schema. Data association module 39 may use an electronic thesaurus to identify equivalents of the attribute names included in the ontologies of the target schema. For example, data association module 39 may determine that "point width" and "tip thickness" are equivalents of a "tip size" attribute. Data association module 39 may then search the target data for each of the equivalents. If a match with a equivalents an equivalent is





found, data association module 39 identifies the target data associated with the matching equivalent (such as the values in a column identified by the equivalent) so that the data may be associated with classes having an ontology including the attribute name from which the equivalent was derived. If appropriate, the data searched may exclude data that was identified in step 204. Furthermore, data identified using any of the techniques described herein may be excluded from consideration by later executed techniques, if appropriate. Therefore, the amount of data that is analyzed may be reduced as each technique is successively performed.